FUTURE FISHERIES IMPROVEMENT PROGRAM
GRANT APPLICATION
(please fill in the highlighted areas)

I. APPLICANT INFORMATION

A. Applicant Name: Big Blackfoot Chapter of Trout Unlimited

B. Mailing Address: PO Box 1

C. City: Ovando State: MT Zip: 59854

Telephone: 406-240-4824

D. Contact Person: Ryen Neudecker

Address if different from Applicant:

City: State: Zip:

Telephone:

E. Landowner and/or Lessee Name (if other than Applicant): United States Forest Service-George Liknes, Fish Biologist

Mailing Address: 1569 US HWY 200

City: Lincoln State: MT Zip: 59639

Telephone: 406.362.7003

II. PROJECT INFORMATION*

A. Project Name: Yukon Creek Fish Passage Improvement Project

River, stream, or lake: Yukon Creek

Location: Township 15N Range 9W Section 29

County: Lewis and Clark

B. Purpose of Project:

The purpose of this project is to address an undersized culvert near the mouth of Yukon Creek that blocks migration corridors for native trout during high flow periods and creates impairments to the channel.

C. Brief Project Description:

Yukon Creek is a second-order tributary to Beaver Creek and supports fluvial, genetically pure westslope cutthroat trout. Beaver Creek is a high priority tributary as outlined in Montana Fish, Wildlife and Parks "Integrated Stream Restoration and Native Fish Conservation Strategy for 182 stream in the Blackfoot Basin, Montana". This project has been identified as a priority under the ***Collaborative Forest Landscape Restoration Program***—a program identified in 2009 by the Secretary of Agriculture to encourage the collaborative, science-based ecosystem restoration of priority forest landscapes. This project will address the existing stream crossing near stream-mile 0.18 on the United States Forest Service properties that is undersized, impedes fish passage during high flow periods and creates impairments to the channel. The existing 60" culvert is proposed to be replaced with a bottomless arch structure that will allow uninhibited aquatic organism passage and replicate the stream bed up and down stream of the crossing.

The existing undersized culvert on Yukon Creek causing channel impairment and depression of migratory life histories is proposed to be replaced with a bottomless arch structure following Stream Simulation methods and principles that will result in a stable stream crossing that will correct the current road drainage problems, eliminate delivery of excessive sediment, provide for fish passage and restore the natural channel morphology to the site. A basic topographic and hydraulic field survey was conducted to locate key physical features within the area of the existing culvert. A long profile, stream cross-sections, bankfull widths, and general geomorphologic parameters were collected. The new structure dimensions were sized based on stream characteristics collected from the reference reach and hydraulic analysis. The hydraulic capacity of the structure was analyzed to ensure that it satisfies a 100-year flood event. Reference reach data collected indicated that bankfull width is close to 12 ft, 6 inches. To meet Stream Simulation guidelines, our new structure width will be 16' long to accommodate bankfull and an appropriate floodplain. Grade control step pools will also be built as the channel grade is close to 4.5%. Please refer to attached map, photos and design.

D. Length of stream or size of lake that will be treated: The existing undersized culvert near stream mile 0.18 will be replaced to restore connectivity to 3.1 miles of Yukon Creek.

E. Project Budget:

Grant Request (Dollars): $ 23,400

Contribution by Applicant (Dollars): $ _____ In-kind $ 4,800
(salaries of government employees are not considered as matching contributions)

Contribution from other Sources (Dollars): $ 134,377.50 In-kind $ _____
(attach verification - See page 2 budget template)

Total Project Cost: $ 162,577.50

F. Attach itemized (line item) budget – see template

G. Attach specific project plans, detailed sketches, plan views, photographs, maps, evidence of landowner consent, evidence of public support, and/or other information necessary to evaluate the merits of the project. If project involves water leasing or water salvage complete supplemental questionnaire (fwp.mt.gov/habitat/futurefisheries/supplement2.doc).

H. Attach land management and maintenance plans that will ensure protection of the reclaimed area.

III. PROJECT BENEFITS*

A. What species of fish will benefit from this project?:

Westslope cutthroat trout

B. How will the project protect or enhance wild fish habitat?:

Habitat conditions within Yukon Creek are good with low levels of disturbance along the streambank and relatively low levels of fine sediment in stream gravels used for spawning. Upgrading of undersized stream crossing structures and reducing risk of structure failure will not only provide for complete aquatic organism passage but will reduce risk for further increases in sediment levels in portions of Beaver Creek.

C. Will the project improve fish populations and/or fishing? To what extent?:

Yes, by providing off-site recruitment to Beaver Creek, the Blackfoot River and angling opportunities on-site. Beaver Creek enters a portion of the Blackfoot River that receives high angling pressure.

D. Will the project increase public fishing opportunity for wild fish and, if so, how?:

Yes, by increasing wild trout habitat in the Blackfoot River drainage. The public also has legal streamside access via adjacent USFS lands.

E. If the project requires maintenance, what is your time commitment to this project?:

The USFS has committed to maintaining the bottomless arch culvert for its life expectancy. The proposed structure will be essentially maintenance-free structures and the life expectancy is estimated to be between 75 and 100 years.

F. What was the cause of habitat degradation in the area of this project and how will the project correct the cause?:

Already answered.

G. What public benefits will be realized from this project?:

This project involves the continuation of the Blackfoot River Restoration program and the restoration of a westslope cutthroat stream. Public benefits include: 1) recruitment of recreational fisheries to the Blackfoot River, 2) improved water quality (sediment reductions) on-site and downstream, and 3) contribute to the recovery of a species of special concern.

H. Will the project interfere with water or property rights of adjacent landowners? (explain):

No

I. Will the project result in the development of commercial recreational use on the site?: (explain):

No

J. Is this project associated with the reclamation of past mining activity?:

No

Each approved project sponsor must enter into a written agreement with the Department specifying terms and duration of the project.

IV. AUTHORIZING STATEMENT

I (we) hereby declare that the information and all statements to this application are true, complete, and accurate to the best of my (our) knowledge and that the project or activity complies with rules of the Future Fisheries Improvement Program.

Applicant Signature: Ryan Nendecker Date: 11-25-2014

Sponsor (if applicable):

***Highlighted boxes will automatically expand.**

Mail To:
Montana Fish, Wildlife & Parks
Habitat Protection Bureau
PO Box 200701
Helena, MT 59620-0701

Incomplete or late applications will be returned to applicant.

Applications may be rejected if this form is modified.

*****Applications may be submitted at anytime, but must be received by the Future Fisheries Program office in Helena before December 1 and June 1 of each year to be considered for the subsequent funding period.*****

Photos 1-2: Existing inlet and outlet on stream crossing structure near stream-mile 0.18 on Yukon Creek.

WORK ITEMS (ITEMIZE BY CATEGORY)	NUMBER OF UNITS	UNIT DESCRIPTION*	COST/UNIT	TOTAL COST	CONTRIBUTIONS			
					FISHERIES REQUEST	IN-KIND SERVICES	IN-KIND CASH	TOTAL
Personnel								
Survey	24	hours	$70.00	$ 1,680.00			$ 1,680.00	$ 1,680.00
Design	75	hours	$90.00	$ 6,750.00			$ 6,750.00	$ 6,750.00
Engineering	60	hours	$90.00	$ 5,400.00			$ 5,400.00	$ 5,400.00
Permitting	20	hours	$40.00	$ 800.00		$800		$ 800.00
Oversight	125	hours	$86.50	$ 10,812.50		4,000.00	6,812.50	$ 10,812.50
Labor	80	hours	$45.00	$ 3,600.00			3,600.00	$ 3,600.00
				$ -				$ -
Travel								
Mileage	2000	miles	$0.58	$ 1,160.00			1,160.00	$ 1,160.00
Per diem	15	days	$45.00	$ 675.00			675.00	$ 675.00
Construction Materials								
Placed riprap, class 4	138	cubic yards	$100.00	$ 13,800.00			$13,800	$ 13,800.00
Seeding, revegetation	LS	each	$4,500.00	$ 4,500.00			$4,500	$ 4,500.00
Dewatering, Soil erosion, pollution control	LS	each	$12,000.00	$ 12,000.00			$12,000	$ 12,000.00
Grade Control Structures	4	each	$4,500.00	$ 18,000.00	2,000.00		16,000.00	$ 18,000.00
Precast concrete member, footings	LS	each	$30,000.00	$ 30,000.00	3,400.00		26,600.00	$ 30,000.00
Structural Plate Arch	LS	each	$22,000.00	$ 22,000.00	10,000.00		12,000.00	$ 22,000.00
Equipment								
Hydraulic Excavator	150	hours	$140.00	$ 21,000.00	6,000.00		15,000.00	$ 21,000.00
Dump Truck	60	hours	$90.00	$ 5,400.00	2,000.00		3,400.00	$ 5,400.00
Mobilization								
Mob/demob	1	lump sum	$5,000.00	$ 5,000.00	-		5,000.00	$ 5,000.00
			TOTALS	$ 162,577.50	$ 23,400.00	$ 4,800.00	$ 134,377.50	$ 162,577.50

MATCHING CONTRIBUTIONS

CONTRIBUTOR	IN-KIND SERVICE	IN-KIND CASH	TOTAL
USFS	$ -	$ 134,377.50	$ 134,377.50
BBCTU	$ 4,800.00	$ -	$ 4,800.00

Date: November 19, 2014

Future Fisheries Citizens Panel
Montana Fish, Wildlife & Parks,
Habitat Bureau
Fisheries Division
1420 East 6th Avenue
P.O. Box 200701
Helena, MT 59620-0701

Dear Members of the Future Fisheries Citizen Panel:

RE: Yukon Creek Fish Passage Improvement Project

The Helena National Forest has been working with The Big Blackfoot Chapter of Trout Unlimited and Montana Fish, Wildlife and Parks in a comprehensive effort to improve native fish habitat, correct connectivity issues, and reduce anthropomorphic sediment delivery to streams and rivers in the upper Blackfoot drainage. One of the current projects involves replacing an undersized culvert on Yukon Creek where Forest Service Road 4106 crosses the stream. The pipe would be replaced with a bottomless arch structure that would provide for Aquatic Organism Passage, allow the flow capacity for a 100 year recurrence interval, it would allow the creation of a floodplain at the crossing, and modify road runoff patterns that are not possible with the existing crossing to reduce sediment delivery to the stream. While most funds have been secured on this project, which will cost slightly more than $162,500.00, we are trying to obtain required match for the secured funds. Please support the grant request for $23,400 so this project that will benefit a westslope cutthroat trout population can be implemented this summer. This and other improvements may also help maintain a larger connected patch size that could aid in restoring a resident bull trout population to the Beaver Creek drainage that was sampled historically, but if present today is at very low densities.

Thank you for your consideration. If you have questions about this proposed project that was developed to benefit fisheries resources in the Blackfoot River drainage, please contact me anytime at 406.362.7003.

Sincerely,

George Liknes

GEORGE LIKNES
Aquatic Program Leader

cc: Mike Seawall, Acting District Ranger
Dave Callery, Watershed Program Manager
R. Neudecker, Big Blackfoot Chapter Trout Unlimited

To: Michelle McGree

From: Ron Pierce, Fisheries Biologist Blackfoot River Basin

Date: 11-26-2014

Subject: Future Fisheries Applications

In addition to writing the Douglas Creek FF application, I've reviewed five TU-related Future Fisheries application from my work area. These five projects include three on the USFS lands (Theodore Creek, Yukon Creek, Stonewall Creek), one project in cooperation with the University of Montana (Shanley Creek), and one found entirely on private land (West Fork of Jacobsen Creek). From my review, all projects are worthy of support; all have some native fish value.

The FS projects are important because they represent an ongoing broad-level effort to correct road impacts at regional scale of the upper Blackfoot Basin. These are legacy projects that should specifically benefit westslope cutthroat trout. The Shanley Creek project is an opportunity to correct lingering riparian/fisheries issues on the U of M Bandy Ranch. The West Fork of Jacobsen Creek should complete stream restoration work on that property.

Please let me know if you have any questions.